ROUTE 405
SEPULVEDA PASS WIDENING PROJECT
Precast Overview

PCMAC MEETING – November 03, 2010

Jon Hamaguchi, PE – Caltrans
Y. Nien Wang, PE – HNTB Corporation
Project Area Vicinity Map
Project Area Location Map
View North at Route 405 / Route 10 Interchange
View North at Route 405/ Montana Avenue
View South at Route 405 / Sepulveda Boulevard
I-405 Stake Holders

- Metro
- Caltrans
- City of Los Angeles
- County of Los Angeles
- Metropolitan Water District
- Phone Companies
- Gas Company
- Los Angeles City Dept. of Water & Power (LADWP)
- Petroleum Companies
Project Team

Owner – Metro/Caltrans
Contractor – Kiewit Pacific Company
  Precast Girder : CONFAB
  MSE wall Panel : SURECAST
  Precast Driven Pile : KIE-CON
  Precast RCB/RCP Vault : PRE-CON
  Inlet : PRO-CAST
Designer - HNTB Corporation w/ support by IDC/WKE
  Bridge Geotech – Earth Mechanics Inc.
  Wall Geotech – Kleinfelder
Contract

• Bid - 739 Million (10 Miles)
• Bid Opening – Feb. 20, 2009
• Notice To Proceed (NTP) – June 2, 2009
• 1550 Calendar Days From NTP
• Completion Date – Nov. 27, 2013
• Liquidated Damage (LD) - $120,000/day
• Incentives - $120,000/day (180 days max.)
Major Quantities

- 26 Bridges (Replacement and Widening Bridges)
- 68 Retaining Wall - 927,000 SF/53,000 LF
- 27 Sound wall - 27,000 LF
- Cast-in-place Concrete – 110,000 CY
- Excavation - 900,000 CY
- Backfill/Embankment – 600,000 CY
- Bridge Piling - 86,000 LF
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Contract Precast Elements

- Precast Bulb-T Girders
- Precast I Girders
- Precast Deck Panel (as Deck Form)
- MSE wall Panels
- Precast Driven Piles
- Precast Drainage/Utility Vaults
- Others
Sunset Blvd OC

Conceptual Visual Simulation (South Elevation)

Conceptual Visual Simulation (Enlargement)
Skirball Center Drive OC

Conceptual Visual Simulation (South Elevation)

Conceptual Visual Simulation (North Elevation)
Getty Center Drive UC

Getty Center Drive UC Elevation

Enlargement

Section (Typical)

Kiewit | Caltrans | 405 BUILD | HNTB
Wilshire Boulevard Underpass
Bridge 10 & 11 Re-Design (Changing from Steel to Bulb T Girder)
Wilshire Boulevard Underpass – MSE Wall Abutments
Wilshire Boulevard Underpass – MSE Wall Abutments
Bridge 6 MSE Wall Panels
Bridge 6 Abutment Piles & MSE Wall
Bridge 6 MSE Wall Placement

8/2010 I-405 PROJECT CREWS CHECKING VERTICAL AND HORIZONTAL ALIGNMENT OF FIRST ROW OF MSE PANELS AT WALL 1665
Corner Treatment
- Smooth Finish Concrete
Soil Nail Walls
Soil Nail Walls
Why Precast

• Material Cost
• Shipping/Handling Cost
• Construction Cost
• Long Term Maintenance Cost
• Quality Control
Precast vs. Design-Build

• Precast process begin right after the design is approved
• Schedule advantage when controlled by Contractor
• Cost advantage by combining designer with builder
• Reduce/Eliminate lane closure time/delay
• Reduce/Eliminate MOT cost
Exist Sunset Blvd Partial Removal
http://www.metro.net/projects/I-405/

To Be Continued

Questions !!!